

## INTERNET DOCUMENT INFORMATION FORM

**A . Report Title:** Projections of Expenditures for Long-Term Care Services for the Elderly

**B. DATE Report Downloaded From the Internet:** 03/12/02

**C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #):**  
Congressional Budget Office  
Second and D Streets, SW  
Washington, DC 20515

**D. Currently Applicable Classification Level:** Unclassified

**E. Distribution Statement A:** Approved for Public Release

**F. The foregoing information was compiled and provided by:**  
**DTIC-OCA, Initials:** \_\_VM\_\_ **Preparation Date** 03/12/02

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# CBO MEMORANDUM

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PROJECTIONS OF EXPENDITURES  
FOR LONG-TERM CARE SERVICES  
FOR THE ELDERLY

March 1999

20020313 094

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CONGRESSIONAL BUDGET OFFICE  
SECOND AND D STREETS, S.W.  
WASHINGTON, D.C. 20515

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ABT 02-06-0976

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## NOTES

The years referred to in this memorandum are calendar years.

Numbers in the text and tables of this memorandum may not add up to totals because of rounding.

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This memorandum presents the Congressional Budget Office's (CBO's) projections of national expenditures for long-term care services for the elderly. It responds to a request from the Chairman of the House Committee on the Budget. Stuart Hagen of CBO's Health and Human Resources Division wrote the memorandum under the direction of Joseph Antos and Linda Bilheimer. Jeanne DeSa, Cynthia Dudzinski, and Dorothy Rosenbaum of the Budget Analysis Division assisted in estimating Medicare and Medicaid expenditures. Duke University's Center for Demographic Studies and the Lewin Group provided data and helpful insights.

Liz Williams edited the manuscript, Chris Spoor proofread it, and Sharon Corbin-Jallow and Ronald Moore prepared the final version for publication. Laurie Brown prepared the electronic versions for CBO's World Wide Web site (<http://www.cbo.gov>).

Questions about the projections may be directed to Stuart Hagen.

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## INTRODUCTION

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The Congressional Budget Office (CBO) expects national expenditures for long-term care services for the elderly (people ages 65 and older) to grow each year through 2040. The main reason for that growth is that the U.S. population is aging, and elderly people receive the most long-term care services because they are far more likely than younger people to have some kind of functional limitation. In 1993, for example, people 65 years of age and older accounted for almost three-quarters of all long-term care spending.

The large number of baby boomers will begin to reach age 65 in 2011, swelling the ranks of the elderly. In addition, more elderly people will reach advanced ages (85 and older) than in the past because of declining mortality rates. Those trends will cause the proportion of the population that is elderly, which was just under 13 percent in 1995, to rise to 20 percent in 2040. More important, the population over age 85—the segment most likely to require long-term care—will grow to over three times its current size by 2040. Even though reductions in the age-specific prevalence of functional disability will offset some of the demand for long-term care, overall demand will still rise substantially.

### A Definition of Long-Term Care

For this memorandum, "long-term care" refers to the medical, social, personal care, and supportive services needed by people who have lost some capacity for self-care because of a chronic illness or condition. That definition excludes medical care for acute conditions; however, postacute care, such as skilled nursing care and home health care, is often classified as long-term care. Therefore, CBO has included payments for such services in the projections presented in this memorandum. CBO has excluded, however, services provided at assisted living facilities and adult day care centers, which may be lower-cost substitutes for nursing home care, because of a lack of data.

### Who Pays for Long-Term Care?

The largest purchaser of long-term care is the federal government, mainly through the Medicare and Medicaid programs. In 1995, Medicare and Medicaid together accounted for just over \$50 billion, or about 56 percent, of long-term care expenditures for the elderly. Although Medicare primarily pays for acute medical services, Medicare beneficiaries may also receive limited long-term care services through the program because of Medicare's skilled nursing and home health care benefits. In fact, Medicare is now the largest purchaser of home health care, which meets both

postacute and chronic care needs. Medicaid covers nursing home stays as well as some types of home care, depending on the provisions of each state's Medicaid program.

In addition to the Medicare or Medicaid long-term care benefits they may receive, people may pay for such services with personal resources, using income and savings, as well as financial contributions from family members, friends, and community organizations. Often, a family member or close friend may care for a disabled person and provide many hours of unpaid care. The value of that care is hard to accurately estimate because data are lacking. Nonetheless, the Department of Health and Human Services estimates that the value of donated care ranges from \$45 billion to \$94 billion per year.<sup>1</sup> Both donated care and the amount of care paid for out of pocket will increase in the next few decades, but their shares of total long-term care expenditures will probably decline. Private insurance policies will probably become a more important funding source for long-term care services. Consequently, CBO's projections of future long-term care expenditures assume a growing role for private long-term care insurance.

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1. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, Administration on Aging, *Informal Caregiving: Compassion in Action* (June 1998).

## PROJECTIONS OF LONG-TERM CARE EXPENDITURES

On the basis of projections made by the Lewin Group and researchers at Duke University, CBO estimates that inflation-adjusted expenditures for long-term care for the elderly will grow annually by 2.6 percent between 2000 and 2040. Those expenditures are projected to reach \$207 billion in 2020 and \$346 billion in 2040 (see Table 1). (All estimates of spending are presented in inflation-adjusted 2000 dollars to facilitate comparisons over time.) Long-range projections of the expenditures should be viewed cautiously, however, because such projections cannot be made with certainty. That is why this memorandum focuses mainly on expenditures for the 2000-2020 period.

Medicare and Medicaid will probably pay for the majority of long-term care services during that period. Medicaid will continue to be the largest overall funding source because of its dominant role in nursing home care and recently growing role in paying for home and community-based care. CBO assumes that a rising proportion of long-term care services will be provided in the home and that Medicaid will pick up a growing share of those expenditures. The estimates of expenditures also assume that private insurance spending for long-term care will rise during the 2000-2020 period. Without that assumption, CBO would have projected the overall long-term care expenditures to be somewhat lower in 2020 and the proportion of expenditures paid by Medicare, Medicaid, and out of pocket to be higher. Under that

TABLE 1. PROJECTIONS OF NATIONAL LONG-TERM CARE EXPENDITURES FOR THE ELDERLY (In billions of 2000 dollars)

| Payer  | 2000     | 2010     | 2020     | 2030 <sup>a</sup> | 2040 <sup>a</sup> |
|--|----------|----------|----------|-------------------|-------------------|
| <b>Services Provided in an Institutional Setting</b> |          |          |          |                   |                   |
| Medicare   | 12.3     | 16.0     | 19.5     |                   |                   |
| Medicaid   | 36.2     | 52.0     | 57.7     |                   |                   |
| Private Long-Term Care Insurance                     | b        | 11.2     | 25.9     |                   |                   |
| Out of Pocket  | 34.3     | 29.3     | 35.6     |                   |                   |
| Other Payer  | <u>b</u> | <u>b</u> | <u>b</u> |                   |                   |
| Total  | 85.8     | 108.5    | 138.7    | 191.7             | 217.9             |
| <b>Services Provided in the Home</b>                 |          |          |          |                   |                   |
| Medicare   | 17.1     | 23.8     | 31.0     |                   |                   |
| Medicaid   | 7.1      | 14.9     | 17.7     |                   |                   |
| Private Long-Term Care Insurance                     | b        | 5.5      | 10.2     |                   |                   |
| Out of Pocket  | 8.5      | 6.3      | 7.3      |                   |                   |
| Other Payer  | <u>b</u> | <u>b</u> | <u>b</u> |                   |                   |
| Total  | 37.2     | 52.2     | 68.6     | 103.3             | 128.2             |
| <b>Total Long-Term Care Services</b>                 |          |          |          |                   |                   |
| Medicare   | 29.4     | 39.8     | 50.6     |                   |                   |
| Medicaid   | 43.3     | 66.9     | 75.4     |                   |                   |
| Private Long-Term Care Insurance                     | 5.0      | 16.7     | 36.2     |                   |                   |
| Out of Pocket  | 42.8     | 35.5     | 42.9     |                   |                   |
| Other Payer  | <u>b</u> | <u>b</u> | <u>b</u> |                   |                   |
| Total  | 123.1    | 160.7    | 207.3    | 295.0             | 346.1             |

SOURCE: Congressional Budget Office.

a. Estimates of each payer's expenditures cannot be determined.

b. Less than \$5 billion.

scenario, total expenditures for long-term care would become progressively larger after 2020 but would still be less than if private insurance was included (see Table 2). Expenditures are projected to be higher when private insurance is included

TABLE 2. PROJECTIONS OF NATIONAL LONG-TERM CARE EXPENDITURES FOR THE ELDERLY, ASSUMING NO INCREASE IN PRIVATE LONG-TERM CARE INSURANCE (In billions of 2000 dollars)

| Payer  | 2000     | 2010     | 2020     | 2030 <sup>a</sup> | 2040 <sup>a</sup> |
|--|----------|----------|----------|-------------------|-------------------|
| <b>Services Provided in an Institutional Setting</b> |          |          |          |                   |                   |
| Medicare   | 12.3     | 17.6     | 21.6     |                   |                   |
| Medicaid   | 36.2     | 57.0     | 69.7     |                   |                   |
| Out of Pocket  | 37.0     | 32.1     | 44.5     |                   |                   |
| Other Payer  | <u>b</u> | <u>b</u> | <u>b</u> |                   |                   |
| Total  | 85.4     | 106.7    | 135.8    | 186.2             | 210.0             |
| <b>Services Provided in the Home</b>                 |          |          |          |                   |                   |
| Medicare   | 17.1     | 24.0     | 31.1     |                   |                   |
| Medicaid   | 7.1      | 15.0     | 18.1     |                   |                   |
| Out of Pocket  | 8.5      | 6.3      | 7.6      |                   |                   |
| Other Payer  | <u>b</u> | <u>b</u> | <u>b</u> |                   |                   |
| Total  | 35.3     | 47.0     | 59.3     | 83.4              | 98.1              |
| <b>Total Long-Term Care Services</b>                 |          |          |          |                   |                   |
| Medicare   | 29.4     | 41.5     | 52.7     |                   |                   |
| Medicaid   | 43.3     | 72.0     | 87.8     |                   |                   |
| Out of Pocket  | 45.5     | 38.4     | 52.1     |                   |                   |
| Other Payer  | <u>b</u> | <u>b</u> | <u>b</u> |                   |                   |
| Total  | 120.7    | 153.8    | 195.1    | 269.5             | 308.1             |

SOURCE: Congressional Budget Office.

a. Estimates of each payer's expenditures cannot be determined.

b. Less than \$5 billion.

because insurance lowers the price faced by long-term care users, which encourages greater utilization.

## METHOD OF ANALYSIS

CBO's expenditure projections combine separate estimates of the elderly population and per capita expenditures for long-term care, classified by disability category and type of payer. Kenneth Manton of the Center for Demographic Studies at Duke University provided the population trend estimates, which are based on the National Long-Term Care Survey (NLTCS). The Lewin Group provided the per capita expenditure estimates, generated by its long-term care financing model. Both the population and the per capita spending projections depend critically on the researchers' underlying assumptions. Small changes in those assumptions can greatly affect the projections. For example, changes take place every year in the delivery of long-term care, and the demand for such services and their means of provision could differ greatly in 20 years in ways that researchers cannot predict.

The population projections assume that current trends in disability among the elderly will continue until 2040, with the prevalence of disability declining, on average, by 1.1 percent a year. Under that assumption, although the number of disabled people 65 and older will rise each decade from 2000 to 2040, the proportion of the elderly population that is disabled will fall (see Table 3).

TABLE 3. PROJECTIONS OF THE U.S. POPULATION AGES 65 AND OLDER,  
BY DISABILITY STATUS (In millions)

|                                   | 2000 | 2010 | 2020 | 2030 | 2040 |
|-----------------------------------|------|------|------|------|------|
| Total                             | 35.7 | 40.6 | 53.9 | 71.0 | 77.9 |
| Nondisabled                       | 26.9 | 31.3 | 43.5 | 58.6 | 65.7 |
| Disabled <sup>a</sup>             | 8.8  | 9.2  | 10.4 | 12.3 | 12.1 |
| Disabled as a Percentage of Total | 24.6 | 22.7 | 19.3 | 17.4 | 15.6 |

SOURCE: Congressional Budget Office calculations based on data from the Lewin Group and the Center for Demographic Studies at Duke University.

a. People unable to perform one or more of the activities of daily living, such as toileting and bathing, or instrumental activities of daily living, such as preparing meals and using the telephone.

Overall expenditure estimates are very sensitive to that assumption. For example, if the projected elderly population for 2040 had the same prevalence of disability as that projected for 2000, total long-term care expenditures would be \$484 billion, about 40 percent higher than CBO's estimate of \$346 billion.

NLTCS data indicate that the prevalence of disability fell by an average of 1.1 percent per year in all disability categories between 1982 and 1989, with some categories declining more steeply than others. From 1989 to 1994, the prevalence of disability fell more rapidly—by 1.5 percent per year. Data from other sources confirm that decline. Many demographers believe such declines will continue for at least the next two decades. Contributing to that trend, future generations of the elderly will increasingly have sociodemographic characteristics associated with a lower prevalence of disability. Analysts have observed that educational attainment, for

example, is an important predictor of disability: people with more education are less likely to be disabled than those with less education because the former are more likely to adopt healthy behaviors and choose occupations with fewer physical demands. The proportion of the U.S. population that has graduated from high school has steadily increased. In 1980, only 39 percent of people over age 65 had graduated from high school. In 1990, that figure had risen to over 50 percent; by 2030, it is projected to reach 83 percent.

Although a 1.1 percent annual decline in the prevalence of disability may be reasonable, predicting that future prevalence with any accuracy is impossible. Consequently, expenditure estimates, particularly those for later time periods, should be viewed with much caution.